Brian Tu

COMPUTER SCIENCE · UNIVERSITY OF WATERLOO

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Summary of Qualifications

Technical Skills

- JavaScript HTML CSS Python C/C++ Java Racket
- Node.js Express.js Socket.IO React MongoDB SQL jQuery Boostrap Git Heroku Google GCP
- Proficient in object-oriented and functional programming, RESTful APIs, and Full Stack development learned through various projects.

Soft Skills

- Excellent teamwork and cooperative skills honed through collaborative projects at various hackathons.
- Strong communication skills developed in workplace environments as well as from volunteer and leadership experience.
- Able to grasp new concepts quickly with a self-motivated willingness to learn.

Projects

Companion - see devpost   *Jan 2021*

AWARDED HONORABLE MENTION @ NWHACKS

- A smart social network that allows those in times of hardship to find people to talk to, empowering positive social communication.
- Integrated sentiment analysis on messages and data visualization of client statistics to cultivate healthy relationships.
- Built with Node.js and Express.js as the back-end with Firebase database to track total user intent, messages, and time spent.
- Led the back-end development, created the private and group chats using Socket.IO to facilitate realtime chat functionality.

Lemons Live - see code   *Oct 2020*

AWARDED TOP 30 @ DIGITAL INCLUSION CHALLENGE 2020

- A real-time platform for interactive learning, enabling teachers to engage their students by creating online team competitions.
- Built on a MongoDB, Express.js, Node.js stack and Tailwind UI to provide students with an engaging learning experience.
- Developed the RESTful API back-end and used Socket.IO to integrate and connect online educative games for students and teachers.
- Competed against 1000+ students over 30+ countries.

CredID - see devpost   *Jan 2020*

AWARDED "MOST INNOVATIVE USE OF TECH FOR GOOD" @ UOFTHACKS VII

- A web application that provides people without an official identity a digital identity to get access to basic financial and medical services.
- Built using AWS Rekognize API that recognizes users faces to create their own identity, and stored on the Ethereum blockchain, allowing users to use their identity at banks and fulfill their financial needs.
- Created and designed the front-end of the application to provide an intuitive and simple user experience.

Experience

TerraCycle Canada   *Toronto, Canada*

OPERATIONS INTERN   *Jun 2019 - Aug 2019*

- Built a user interface in Excel using VBA to help warehouse workers automate the creation of custom shipment labels for products, resulting in 83% less time needed to create labels.
- Created a chrome extension used by the Director of Operations to download label images from multiple tabs at once to eliminate manual work.
- Coded macros in Excel using VBA to organize data of TerraCycle clients, such as monthly audits.

Education

University of Waterloo   *Waterloo, Canada*

BACHELOR OF COMPUTER SCIENCE, HONOURS   *2020 - 2025*

- 4.0 Major GPA (94%), President's Scholarship of Distinction

Upper Canada College   *Toronto, Canada*

INTERNATIONAL BACCALAUREATE AND ONTARIO SECONDARY SCHOOL DIPLOMA   *2016 - 2020*

- Co-Founder of Rock Band & Head of Ping Pong Club: led and organized performances, ping pong tournaments, promoted student well-being.

Interests

Hackathons

- Hacker at nwHacks 2021, Execute 2020, Digital Inclusions Challenge 2020, UofTHacksVII, Citizen Hacks, MasseyHacks V, BLGHack4Change

Hobbies

- (Sports) soccer, basketball, and biking; (Music) guitar (6+ years) and music production; (DIY) guitar & keyboard